

WE CLAIM:

1. An isolated nucleic acid molecule consisting of the nucleotide sequence set forth in SEQ ID NO: 1.
2. An isolated nucleic acid molecule which hybridizes, under stringent conditions, to the nucleic acid molecule set forth in SEQ ID NO: 1, and which codes for a tumor rejection antigen precursor, wherein said isolated nucleic acid molecule does not code for a MAGE tumor rejection antigen precursor.
3. An isolated molecule which is complementary to the nucleic acid molecule of Claim 1, wherein said molecule is mRNA or DNA.
4. A host cell transfected or transformed with the nucleic acid molecule of Claim 1.
5. A host cell transfected or transformed with the nucleic acid molecule of Claim 2.
6. An expression vector comprising the isolated nucleic acid molecule of Claim 1 operably linked to a promoter.
7. An expression vector comprising the isolated nucleic acid molecule of Claim 2 operably linked to a promoter.
8. The host cell of Claim 4, wherein said host cell is a mammalian cell which expresses HLA-Cw\*1601.
9. The host cell of Claim 5, wherein said host cell is a mammalian cell which expresses HLA-Cw\*1601.
10. The expression vector of Claim 6, further comprising a nucleic acid molecule which codes for HLA-Cw\*1601.

11. The expression vector of Claim 7, further comprising a nucleic acid molecule which codes for HLA-Cw\*1601.

12. An expression kit comprising a separate portion of each of:

(i) the isolated nucleic acid molecule of Claim 1,  
and

(ii) a nucleic acid molecule which codes for  
HLA-Cw\*1601.

13. An expression kit comprising a separate portion of each of:

(i) the isolated nucleic acid molecule of Claim 2,  
and

(ii) a nucleic acid molecule which codes for  
HLA-Cw\*1601.

14. A method for treating a subject with a disorder characterized by the presence of complexes of HLA molecules and the peptide of SEQ ID NO: 3 on cell surfaces comprising the sequence of SEQ ID NO: 1, comprising administering to said subject an amount of cytolytic T cells specific to complexes of HLA molecules and said peptide, sufficient to alleviate said disorder.

15. A method for treating a subject with a disorder characterized by the presence of complexes of HLA molecules and the peptide of SEQ ID NO: 3 on cell surfaces, comprising administering to said subject an amount of an agent which provokes an immune response to complexes of HLA and said peptide, sufficient to

provoke said immune response against cells presenting said complexes.

16. A method for diagnosing a disorder characterized by the presence of complexes of HLA molecules and the peptide of SEQ ID NO: 3 on cell surfaces, comprising contacting a sample from a subject with an agent specific for a tumor rejection antigen consisting of the amino acid sequence of SEQ ID NO: 3, and determining interaction between said agent and said sequence or said expression product as a determination of said disorder.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100